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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/766,839

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EXAMINER

TIMBLIN, ROBERT M

ART UNIT

PAPER NUMBER

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/766,839	Applicant(s) SUZUKI, TAKAMUNE	
	Examiner Robert M. Timblin	Art Unit 2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1, 3-6 and 8-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-6, and 8-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This Office Action corresponds to application 10/766,839. Claims 1, 3-6, and 8-14 have been examined and are currently pending.

#### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/12/2007 has been entered.

#### ***Claim Objections***

Claim 14 objected to because of the following informalities: the first reading step should read "...when a retrieval request *is* identical to the retrieval request" as to improve grammar of this step. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 6 and its depending claims are rejected under 35 U.S.C. 101 because it is directed towards nonstatutory subject matter. Specifically, claim 6 is directed towards a

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cache program (i.e. descriptive material per se) without indicating the use of a computer readable medium to permit the function of the descriptive material to be realized. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. See MPEP 2106.01.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-6, and 8-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Ims et al. ('Ims' hereafter) (U.S. Patent 6,505,200). In the following citations, Ims teaches:

With respect to claim 1, An application server that retrieves data from a database using a retrieval request, which includes a retrieval condition, received from a terminal and transmits the data retrieved as a retrieval result to the terminal, comprising:

a cache memory (drawing reference 300) that stores in a correlated form (col. 9 line 53-65, col. 14 line 51-67) the retrieval condition and the retrieval result (figures 3A-B, col. 5 line 64-67);

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an update condition setting unit (col. 13 line 33) that sets a cache update condition that indicates when the cache memory is to be updated (col. 13 line 31-65 cache policy), wherein the database update condition includes a number of data records updated in the database within a predetermined period (col. 15 line 42-64, col. 17 line 18-29); and

an update processing unit (col. 16 line 58-62) that reads the retrieval condition from the cache memory (300) upon fulfillment of the cache update condition (col. 16 line 58-67), retrieves data as the retrieval result from the database using the retrieval condition (col. 16 line 63-67), and updates the retrieval result in the cache memory (300) corresponding to the retrieval condition (col. 17 line 1-15).

With respect to claim 3, the application server according to claim 1, wherein, when searching the database, the update processing unit acquires a database update condition that indicates when the database is updated and the update condition setting unit sets the cache update condition based on the database update condition acquired (col. 5 line 10-20, col. 10 line 8-15, and col. 13 line 65-col. 14 line 1-7).

With respect to claim 4, the application server according to claim 1, wherein a user sets the cache update condition (col. 10 line 37-48).

With respect to claim 5, the application server according to claim 1, wherein the update processing unit sets next and subsequent cache update conditions using a date and a time of the retrieval result updated (col. 15 line 52-60).

With respect to claim 6, A cache program that stores a retrieval request that includes a retrieval condition and that is received from a terminal and a retrieval result retrieved using the retrieval request in a correlated form in a cache memory, reads a retrieval result from the cache memory when a retrieval request identical to the retrieval request stored in the cache memory is received, and that makes a computer execute:

setting a cache update condition (col. 9 line 53-65, col. 14 line 51-67) that indicates when the cache memory is to be updated (col. 13 line 31-65 cache policy), wherein the database update condition includes a number of data records updated in the database within a predetermined period (col. 15 line 42-64, col. 17 line 18-29); and

reading the retrieval condition from the cache memory upon fulfillment of the cache update condition (col. 16 line 58-67), retrieving data as the retrieval result from the database using the retrieval condition (col. 16 line 63-67), and updating the retrieval result in the cache memory corresponding to the retrieval condition (col. 17 line 1-15).

With respect to claim 8, the cache program according to claim 6, further comprising acquiring a database update condition (col. 15 line 17-25), when searching the database, that indicates when the database is updated, and the setting includes

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setting the cache update condition based on the database update condition acquired (col. 15 lines 30-42).

With respect to claim 9 the cache program according to claim 6, wherein the setting includes setting of the cache update condition by a user (col. 10, lines 38-46).

With respect to claim 10, the cache program according to claim 6, wherein the setting includes setting next and subsequent cache update conditions using a date and a time of the retrieval result updated (col. 15 line 59-67).

With respect to claim 11, An application server system comprising:

a plurality of application servers (figure 2, and 5 and col. 9 line 35-40), each of which retrieves data from a database using a retrieval request (col. 5 line 9-30), which includes a retrieval condition, received from a terminal and transmits the data retrieved as a retrieval result to the terminal, each application server including (abstract and figure 3A-3B).

a cache memory (drawing reference 300) that stores in a correlated form (col. 9 line 53-65, col. 14 line 51-67) the retrieval condition and the retrieval result (figures 3A-B, col. 5 line 64-67);

an update condition setting unit (col. 13 line 33) that sets a cache update condition that indicates when the cache memory is to be updated), wherein the

database update condition includes a number of data records updated in the database within a predetermined period (col. 15 line 42-64, col. 17 line 18-29); and

an update processing unit (col. 16 line 58-62) that reads the retrieval condition from the cache memory upon fulfillment of the cache update condition (col. 16 line 58-67), retrieves data as the retrieval result from the database using the retrieval condition (col. 16 line 63-67), and updates the retrieval result in the cache memory corresponding to the retrieval condition (col. 17 line 1-15).

With respect to claim 12, the application server system according to claim 11, wherein the cache update condition of each application server differs from the cache update condition of any other application server (col. 15 line 65-67).

With respect to claim 13, the application server system according to claim 11, wherein the cache update condition of all the application servers is identical (figure. 3B, and col. 18 line 30-35).

With respect to claim 14, A cache update method comprising:

storing a retrieval request received from a terminal that includes a retrieval condition and a retrieval result (figures 3A-B, col. 5 line 64-67) retrieved using the retrieval request into a correlated form (col. 9 line 53-65, col. 14 line 51-67) in a cache memory (drawing reference 300);



reading the retrieval result from the cache memory when a retrieval request identical to the retrieval request (col. 5 line 9-45);

setting a cache update condition based on a database update condition that indicates when the cache memory is to be updated (col. 13 line 31-65 cache policy);

reading the retrieval condition from the cache memory upon fulfillment of the cache update condition (col. 16 line 58-67);

retrieving data as the retrieval result from the database using the retrieval condition (col. 16 line 63-67); and updating the retrieval result in the cache memory corresponding to the retrieval condition (col. 17 line 1-15).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 3-6, and 8-14 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 7,020,750 B2 to Thiyagarajan et al. The subject matter disclosed therein pertains to the pending claims (i.e. cache updates).

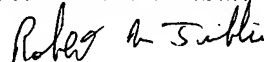
### Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M. Timblin whose telephone number is 571-272-5627. The examiner can normally be reached on M-F 8:00-4:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Robert M. Timblin



Patent Examiner AU 2167  
6/18/2007



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